

and risk group. The time horizon was one year, without discounting. Sensitivity analysis was performed to account for uncertainty. **RESULTS:** Vytorin was found to be most effective with 90% of patients successfully treated to goal compared to 78.2%, 82.1%, and 82.2% for simvastatin, atorvastatin, and rosuvastatin, respectively. Vytorin was the preferred strategy, dominating other treatments at a cost of \$431 annually per patient successfully treated to goal. **CONCLUSION:** Using literature-derived estimates for % LDL lowering efficacy, we compared high-potency antilipidemics based on the percentage of patients successfully treated to goal. Estimates were similar to outcomes reported in clinical trials. At DoD drug acquisition costs, Vytorin appeared to be the most cost effective.

PCV25

THE ECONOMIC AND HEALTH CONSEQUENCES IN MEXICO OF MANAGING HYPERTENSION AND HYPERCHOLESTEROLEMIA WITH A SINGLE PILL THERAPY

Mould-Quevedo J, Salomon-Molina A, Davila-Loaiza G

Pfizer Mexico, Mexico City, Mexico

OBJECTIVES: In Mexico, hypertension and hypercholesterolemia are the main causes of cardiovascular risk and death in adult population. Prevalence of hypertension and hypercholesterolemia are estimated in 30% and 43%, respectively. The purpose of this study was to evaluate the cost-effectiveness of amlodipine/atorvastatin in a single pill therapy compared to other local therapies for patients with both diseases from the Mexican health care payer's perspective. **METHODS:** We used a five-year Markov analysis model to estimate costs and effectiveness. Effectiveness measures were the % of patients with full compliance and % of patients with fatal or non-fatal cardiovascular events. Transition probabilities were obtained from international published literature. Comparators used in the model were: amlodipine 5 mg, felodipine 5 mg, nifedipine 30 mg, captopril 75 mg, enalapril 20 mg, losartan 50 mg all in combination with pravastatin 10 mg (separate pills) vs. the comparator amlodipine 5 mg + atorvastatin 10 mg (single-pill therapy). Estimation of resource use was performed employing hospital records from five hospitals of the Social Security Mexican Institute-IMSS in Mexico City (n = 75). They included hospitalization, ICU, emergency, outpatient services and drugs. Costs and effectiveness measures were discounted 3% annually. One-way and probabilistic sensitivity analyses were performed and acceptability curves were constructed. **RESULTS:** The single-pill therapy showed better compliance with 12.5% vs. 9.6% shown in average by the other combinations considered ($p < 0.01$). This higher compliance of the single-pill therapy yielded a significant reduction in the number of cardiovascular events, deaths and expected costs (cost saving strategy). Alongside the time horizon used, the model estimated that the single-pill therapy could save US\$2.8 per patient with both diseases. Sensitivity analyses showed the same results. **CONCLUSION:** In Mexico, amlodipine/atorvastatin within a single-pill showed better clinical and economic outcomes in comparison to other combinations of antihypertensive and statins inside an institutional setting. These results should be considered by Mexican decision-makers in future cost-containment policies.

PCV26

COST-EFFECTIVENESS OF ROSUVASTATIN AND EZETIMIBE/SIMVASTATIN IN PATIENTS WITH DYSLIPIDEMIA IN MEXICO CITY

Gomez-Briceño GA¹, Mino D²

¹Manuel Gea Gonzalez Hospital, Mexico City, Mexico, ²Instituto Mexicano de Seguro Social, México D.F, México, Mexico

OBJECTIVES: To compare cost-effectiveness (CE) of rosuvastatin (RSV) and ezetimibe/simvastatin (E/S) in patients with treated dyslipidemia to assess achievement of treatment goals established by Adult Treatment Panel III (ATPIII). **METHODS:** Clinical data was obtained from the files of dyslipidemic patients that attended from January 2004 to December 2005 to a Cardiology Hospital in Mexico City. Patients treated with either RSV 10 mg/day or E/S 10/20 mg/day and with lipid determinations before (basal) and after 8 weeks of treatment were included. The perspective of the analysis was from the point of view of the provider, and the cost of the drugs that was obtained by a local wholesaler (NADRO, Oct 2006). Effectiveness was measured with subrogates end points, achieving ATPIII lipid goals and lowering LDL-C levels. The precision of the CE estimate was assessed by the bootstrap method, using 1000 re-samplings and by net monetary benefit approach. Horizon time was 8 weeks. Acceptability curves were built to assess uncertainty. Sensitivity analysis included threshold, one-way and scenario assessment. **RESULTS:** Ninety-eight patients received RSV (age 63.1 ± 12.4 years) and 89 patients received E/S (age 65.8 ± 12.8 years). In the RSV group 81.4% and 46.4% patients achieved 2001 and 2004 lipid goals respectively, versus 58.4% and 31.5% E/S patients ($p < 0.01$). LDL-C mean percentage reduction was: RSV -46.7 ± 13.6 versus E/S -35 ± 21.3 ($p < 0.001$). Average per patient costs in USD was 94.35 for RSV (85.4–109.8) and 143.01 for E/S (127.42–161.64). RSV showed to be less costly and more effective than E/S for achieving ATPIII goals and reducing LDL-C levels. Acceptability showed that independently of willingness to pay, RSV is CE in 97% of scenarios compared to E/S. Sensitivity analysis showed the robustness of results. **CONCLUSION:** On clinical practice RSV is more CE in attainment of ATPIII goals and lowering LDL-C levels in Mexican patients.

PCV27

CLINICAL AND ECONOMIC BURDEN OF NONADHERENCE TO LIPID-LOWERING AND ANTIHYPERTENSIVE THERAPY IN A HYPERTENSIVE POPULATION

Cherry S¹, Benner JS¹, Hussein M¹, Tang S², Nichol MB³

¹ValueMedics Research, LLC, Falls Church, VA, USA, ²Pfizer Global Pharmaceuticals, New York, NY, USA, ³University of Southern California, Los Angeles, CA, USA

OBJECTIVES: To determine the lifetime costs and morbidity associated with nonadherence to lipid-lowering and antihypertensive therapy in a population of hypertensive patients with additional cardiovascular risk factors. **METHODS:** A Markov model was constructed to assess the lifetime costs and outcomes associated with different levels of adherence to lipid-lowering and antihypertensive therapy in a cohort of patients aged 40 to 79 years. Three adherence scenarios were considered: no treatment, typical adherence, and ideal adherence. Patient characteristics were modeled on those of participants in the Anglo-Scandinavian Cardiac Outcomes Trial—Lipid-Lowering Arm (ASCOT-LLA); event probabilities for coronary heart disease and stroke were estimated using risk prediction algorithms from the Framingham Heart Study. The ideal adherence scenario modeled the experience of ASCOT-LLA patients, with adherence levels based on those observed in the trial. The typical adherence scenario employed real-world adherence rates and annual transitions based on prescription records from the California Medicaid system. Risk reductions for the various adherence states in this scenario were drawn from clinical trials. Model outputs included frequencies of primary and secondary heart disease and stroke, life expectancy, and pharmacy-related and event-specific costs in 2006 USD. **RESULTS:** The mean number of events per patient was 0.738 in the no treatment scenario,